10/625,708

1-13 4-7 13-14 13-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 1-13 2-3 3-4 4-5 4-7 5-6 13-14 13-17

Page 3

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 1 : 7 :



Match level :

 $1: A \texttt{tom} \quad 2: A \texttt{tom} \quad 3: A \texttt{tom} \quad 4: A \texttt{tom} \quad 5: A \texttt{tom} \quad 6: A \texttt{tom} \quad 7: A \texttt{tom} \quad 8: A \texttt{tom} \quad 9: A \texttt{tom} \quad 10: A \texttt{tom}$

11:Atom 12:Atom 13:CLASS 14:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:26:59 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -

4 TO ITERATE

100.0% PROCESSED

4 ITERATIONS

2 ANSWERS

<09/21/2005>

Habte

10/625,708 Page 4

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 4 TO 200 PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 15:27:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 127 TO ITERATE

100.0% PROCESSED 127 ITERATIONS 58 ANSWERS

SEARCH TIME: 00.00.01

L3 58 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 161.33 161.54

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 6 L3

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:863095 CAPLUS
DOCUMENT NUMBER: 142:56256
Synthesis and evaluation of pyridazinylpiperazines as vaniloid receptor 1 antagonists
AUTHOR(S): Tafesse, Laykea, Sun, Qun; Schmid, Lori; Valenzano, Kenneth J., Rotshteyn, Yakov, Su, Xin; Kyle, Donald J.
Discovery Research, Purdue Pharma L.P., Cranbury, NJ, 08512, USA
Bioorganic 4 Medicinal Chemistry Letters (2004), 14(22), 5513-5519
COUEN: EMCLES; ISSN: 0960-894X
FUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: Tage Chemical library of pyridazinylpiperazine analogs was prepared in an effort to improve the pharmaceutical and pharmacol. profile of the lead compound N-(4-tert-butylphenyl)-4-(3-chloropyridin-2-yl)terhaydropyrazine-1(21)-carboxamade (ECTC). The library was evaluated for VRI antagonist activity in capsaicin-induced and ph 5.5-induced FLIPR assays in a human VRI-expressing HEKE30 cell line. The most potent VRI antagonists have ICSO values of 9-200 nM with improved pharmaceutical and pharmacol. profiles vs. the lead ECTC. These compds. represent possible second-generation ECTC analogs.

IR 00196-38-59 00196-39-59 00196-63-149 00196-53-49
00196-55-66 00196-63-69 00196-53-69
00196-55-69 00196-63-149 00196-53-69
00196-55-69 00196-63-149 00196-62-59
RLI PAC (Pharmacological activity), RCT (Reactant), RACT (Reactant or reagent)
(synthesis and evaluation of pyridazinylpiperazines as vanilloid receptor 1 antagonists)

NN 00196-38-5 CAPLUS
Nn 1-Piperazinescaptowanide, 4-(6-chloro-3-pyridazinyl)-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

808196-39-6 CAPLUS 1-Piperazinecarboxamide, 4-(6-chloro-3-pyridazinyl)-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

808196-55-6 CAPLUS
1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

www.sp-os-re criss 1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-(6-fluoro-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

dimethylethyl)phenyl] - (9CI) (CA INDEX NAME)

808196-59-0 CAPLUS

1-Piperazinecarboxamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-{4-(1-methylethyl)phenyl]- (9C1) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

808196-40-9 CAPLUS

1-Piperazinecarboxamide, 4-(6-chloro-3-pyridazinyl)-N-(4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

808196-41-0 CAPLUS

1-Piperazinecarboxamide, 4-(6-chloro-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

808196-42-1 CAPLUS

RN CN 1-Piperazinecarboxamide, 4-(6-chloro-3-pyridazinyl)-N-(6-fluoro-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

808196-53-4 CAPLUS

1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

808196-61-4 CAPLUS 1-Piperazinecznowamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

808196-62-5 CAPLUS 1-Piperazinecarboxamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-(6-fluoro-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

652990-54-0P 652990-55-1P 652990-56-2P 652990-57-3P 652990-58-4P 652990-59-5P 722498-19-3P 652990-58-4P 652990-59-5P 722498-19-3P 6508196-43-2P 868196-43-64-5P 868196-43-64-69 868196-63-67-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-69 868196-63-29 868196-94-3P 868196-94-3P 868196-94-3P 868196-94-3P 868196-94-3P 868196-94-3P 868196-94-3P 868196-33-2P 868196-94-3P 868196-39-4P 868196-3

808196-94-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and evaluation of pyridazinylpiperazines as vanilloid receptor 1 antagonists)
652990-54-0 CAPLUS

1-Piperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-4-(4-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 652990-55-1 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-{1,1-dimethylethyl)phenyl}-4-{5-methyl-3-pyridazinyl}- {9CI} (CA INDEX NAME)

RN 652990-56-2 CAPLUS
CN 1-Piperazinecarboxamide, 4-(4-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 652990-57-3 CAPLUS
CN 1-Piperazinecarboxamide, 4-(5-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 808196-44-3 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-(1-methylethyl)phenyl]-4-(6-methyl-3-pyridazinyl)- (9C1) (CA INDEX NAME)

RN 808196-45-4 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 808196-46-5 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 808196-47-6 CAPLUS
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazolyl)-4-(6-methyl-3-pyridazinyl)- (9CI) (CA IMDEX NAME)

RN 808196-52-3 CAPLUS <09/21/2005>

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 652990-58-4 CAPLUS
CN 1-Piperazinecarboxamide, 4-(4-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 652990-59-5 CAPLUS
CN 1-Piperazinecarboxamide, 4-(5-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 722498-19-3 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-(6-fluoro-2-benzothiazolyl)-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 808196-43-2 CAPLUS
CN 1-Fiperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-4-(6-methyl-3-pyridazinyl)-(9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazolyl)-4-(6-methoxy-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 808196-64-7 CAPLUS CN 1-Piperazinecarboxamide, N-[4-(1-methylethyl)phenyl]-4-(6-phenyl-3-pyridazinyl)- (9C1) (CA INDEX NAME)

RN 808196-65-8 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-phenyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

N 808196-66-9 CAPLUS
N 1-Piperazinecarboxamide, 4-(6-phenyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 808196-67-0 CAPLUS
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazoly1)-4-(6-pheny1-3-pyrideziny1)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 608196-73-8 CAPLUS
CN 1-Piperszinecarboxamide, N-[4-{1,1-dimethylethyl)phenyl}-4-(3-pyridazinyl)(9c1) (CA INDEX NAME)

RN 808196-74-9 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-(1-methylethyl)phenyl]-4-(3-pyridazinyl)(9CI) (CA INDEX NAME)

RN 808196-75-0 CAPLUS
CN 1-Piperazinecarboxamide, 4-(3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)

RN 808196-76-1 CAPLUS
CN 1-Piperazinecarboxamide, 4-(3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl)(9C1) (CA INDEX NAME)

RN 808196-77-2 CAPLUS
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazolyl)-4-(3-pyridazinyl)(9C1) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 808196-87-4 CAPLUS
CN 1-Piperazinecarboxamide, N-[1,1'-biphenyl]-4-yl-4-(4-methyl-3-pyridazinyl)(9C1) (CA INDEX NAME)

RN 808196-88-5 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-2-methyl-4-(4-methyl-3-pyridazinyl)-, (2R)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 808196-89-6 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-2-methyl-4-(5-methyl-3-pyridazinyl)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 808196-78-3 CAPLUS
CN 1-Piperazinecarboxamide, N-[4-(1-methylethyl)phenyl]-4-(4-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 808196-79-4 CAPLUS
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazolyl)-4-(4-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 808196-80-7 CAPLUS CN 1-Piperazinecarboxamide, N-[4-(1-methylethyl)phenyl]-4-(5-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

RN 808196-81-8 CAPLUS
CN 1-Piperazinecarboxamide, N-(6-fluoro-2-benzothiazolyl)-4-(5-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 808196-90-9 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-[4-(1,1-dimethylethyl)]benyl]-2-methyl-, (ZR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 808196-91-0 CAPLUS
CN 1-Piperazinecarboxamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-{4-(1,1-dimethylethyl)phenyl]-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

808196-92-1 CAPLUS 1-Piperazinecarhoxamide, 2-methyl-4-(4-methyl-3-pyridszinyl)-N-{4-(trifluoromethyl)phenyl]-, (ZR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

808196-93-2 CAPLUS
1-Piperazinecarboxamide, 2-methyl-4-(5-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

808196-56-7 CAPLUS 1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

808196-60-3 CAPLUS 1-Piperazinecarboxamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

808196-48-7P 808196-49-8P 808196-50-1P 808196-51-2P 808196-53-69 RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis and evaluation of pyridazinylpiperazines as vanilloid receptor 1 antagonists) 808196-48-7 CAPLUS 1-Piperazinearboxamide, N-[4-(1,1-dimethylethyl)phenyl]-4-[6-methoxy-3-pyridazinyl)- (9CI) (CA INDEX NAME)

<09/21/2005>

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

808196-94-3 CAPLUS 1-Piperazinecarboxamide, 4-(6-chloro-5-methyl-3-pyridazinyl)-N-(6-fluoro-2-benzothiazolyl)-2-methyl-, (ZR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

808196-54-5P 808196-56-7P 808196-60-3P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(synthesis and evaluation of pyridazinylpiperazines as vanilloid receptor 1 antagonists)
808196-54-5 CRPLUS
1-Piperazinecarboxamide, 4-(6-chloro-4-methyl-3-pyridazinyl)-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continue 808195-49-8 CAPLUS 1-Piperazinecarboxamide, 4-(6-methoxy-3-pyridazinyl)-N-{4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

808196-50-1 CAPLUS
1-Piperazinecarboxamide, 4-(6-methoxy-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

808196-51-2 CAPLUS 1-Piperazinecarboxamide, 4-(6-methoxy-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

808196-63-6 CAPLUS
1-Piperazinecarboxamide, N-[4-{1,1-dimethylethyl)phenyl]-4-(6-phenyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN CCESSION NUMBER: 2004:566601 CAPLUS OCUMENT NUMBER: 141:123640

DOCUMENT NUMBER:

141:123640

Reterocyclylpiperazinylbenzothiazoles, and heterocyclylpiperazinylbenzindazoles, and heterocyclylpiperazinylbenzoxazoles prepared as antagonists for the matabotropic glutamate receptors mGluRl and mGluRs and as ligands for human VRi Sun, Count Tafesse, Laykes; Victory, Sam Bluc-Celtique S.A., Luxembourg PCT Int. Appl., 705 pp. CONEN: PIXXD2

Patent English 1

INVENTOR (5): PATENT ASSIGNEE (5): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. CO PATENT INFORMATION: COUNT:

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L4 ANSWER 3 OF 6
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DOCUMENT NUMBER:
11TILE:
1NVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:

CAPILUS COPYRIGHT 2005 ACS on STN

100146169
Preparation of pyridazinylpiperazines as VR1
inhibitors for treating pain
Kyle, Donald J., Sun, Qun
Euro-Celtique S.A., Luxembourg
FCT Int. Appl., 174 pp.
CODEN: PIXXD2
Patent
Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.									
WO	2004	0114	41		A1	-									2	0030	725
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW			
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	ΒY,
		KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	ΒĒ,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
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OTHER SO	URCE	(S):			MAR	PAT	140:	1461	69								

AB Title compds. I [wherein X = S or O: A = NH, N(alkyl), or N(alkoxy): R1 = <09/21/2005> Habt.e

ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Heterocyclylpiperazinyl benzothiazoles, benzimidazoles, and benzooxazoles I (A = bond, C(10)NR4, C(15)NR4) Arl = (un)substituted pyridinyl, pyrazinyl, thiadiazolyl, pyrimidinyl, or pyridazinyl, R3 = H, Me, halogen, cyano, hydroxy, alkoxy, nitro, amino, etc.; X = S, O, NR10; R8, R9 = H, elkyl, alkenyl, alkynyl, cycloalkyl, Ph, halo, halomethyl, dihalomethyl, trihalomethyl, cyano, etc.; R10 = H, alkyl] such as II are prepared as antagonists for the metabotropic glutamate receptors sciUR1 and mcDluR5 and as ligands for the protein VR1 for the treatment of pain, addiction, uricary incontinence, irritable-bowel disorder, inflammatory bowel disease, ulcers, Parkinson's disease, epilepsy, seizures, anxiety, psychosis, stroke, prurius, cognitive disorders, memory deficits or restricted brain function, Huntington's chorea, amyotrophic lateral sclerosis, retinopathy, muscle spassas, migraines, vomiting, dyskinesia, and depreasion. Rejocelective coupling of 2,3-dichloropyridine and piperazine yields 1-(3-chloro-2-pyridinyl)piperazine [III], while acylation of 6-(trifluoromethyl)-2-aminobenzothiazole with p-nitrophenyl chlorocarbonate yields p-nitrophenyl [6-(trifluoromethyl)-2-benzothiazolyl]carbamate [IV], coupling of III and IV yields II. II gives ICSO values of 262 and 51 (units not indicated) in pH-based and capsaicin-based assays (resp.) for binding to human VR1.
722498-19-39
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRFF (Preparation); USES (Uses)

(drug candidate, preparation of (heterocyclylpiperazinyl)benzothiazoles, benzimidazoles, and benzooxazoles as metabotropic glutamate receptor antagonists and as ligands for VR1 in treatment of disorders such as addiction and pain)
722498-19-3 CAPUS

Absolute stereochemistry.

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued) halo, Me. ON2, CN. OH., OME. NH2. or halomethyl; R2 and R3 = independently halo, OK, NH2. (cyclo) alkyl, (cyclo) alkenyl, alkynyl, or (un) substituted heterocyclyl; Ph. naphthyl, or (hetero) aryl: or R3 = NO2; R4 = (cyclo) alkyl, (cyclo) alkenyl, alkynyl, or (un) substituted heterocyclyl; Ph. naphthyl, or (hetero) aryl: or (un) substituted heterocyclyl; Ph. naphthyl, or (hetero) aryl: m = 0-2; n = 0-2; and pharmaceutically acceptable salt thereof) were prepd. as vanilloid receptor 1 (VRI) inhibitors. For example, 3,6-dichloro-4-methylpyridazine was coupled with piperazine in DMS to afford a mixt. of regiolsomers, which was reacted with 4-tert-butylphenylisocyanate in DCM and hydrogenated with HZ over Pd in MeOH to provide II and its 7-He isoner. In pH-hased and capsaicin-based binding assays, II inhibited activity of the human VRI receptor with ICSO values of 220.7 ± 50.4 ml and 47.2 ± 9.9 ml, resp. Thus, I and their pharmaceutical compns. are useful for treating or preventing pain, urinary incontinence (UI), inflammatory bovel disease (IBD), irritable bowel syndrome (IBS), or an ulcer (no data). 652390-40-P, 4-(4-Hethylpyridazin-3-yl)piperazine-1-carboxylic acid N-(4-tert-butylphenyl) amide 652390-55-1P, 4-(5-Methylpyridazin-3-yl) piperazine-1-carboxylic acid N-(4-trifluoromethylphenyl) amide 652390-659-59, 4-(4-Methylpyridazin-3-yl) piperazine-1-carboxylic acid N-(4-trifluoromethylphenyl) amide 652390-659-59, 4-(5-Methylpyridazin-3-yl)piperazine-1-carboxylic acid N-(4-trifluoromethylphenyl) amide 652390-659-59, 4-(5-Methylpyridazin-3-yl) piperazine-1-carboxylic acid N-(4-trifluoromethylphenyl) amide 652390-659-59, 4-(5-Methylpyridazin-3-yl) p

(Uses) (VRI inhibitor, preparation of pyridazinylpiperazines as URI inhibitors

treating pain and intestinal disorders)
652990-54-0 CAPUS
1-Piperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-4-(4-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

652990-55-1 CAPLUS
1-Piperazinecarboxamide, N-[4-(1,1-dimethylethyl)phenyl]-4-(5-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

Page 10

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

652990-56-2 CAPLUS 1-Piperazinecarboxamide, 4-(4-methyl-3-pyridazinyl)-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

652990-57-3 CAPLUS 1-Piperazinecarboxamide, 4-(5-methyl-3-pyridazinyl)-N-{4-(trifluoromethyl)phenyl}- (9CI) (CA INDEX NAME)

652990-58-4 CAPLUS 1-Piperazinecarboxamide, 4-(4-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

652990-59-5 CAPLUS

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2003:76773 CAPLUS
DOCUMENT NUMBER: 138:1373373
TITLE: Preparation

138:137337
Preparation of N-phenylsulfonyl-1,3-dihydro-2H-indol-2one derivatives containing piperazinylcarbonyl or
homopiperazinylcarbonyl as vasopressin receptor
inhibitors, their preparation and their therapeutic

innibitors, their preparation and their therapeu use Di Malta, Alain; Garcia, Georges; Roux, Richard; Schoentjes, Bruno; Serradeil-le Gal, Claudine; Tonnerre, Bernard; Wagnon, Jean Sanofi-Synthelabo, Fr. PCT Int. Appl., 112 pp. CODEN: PIXXD2 INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATI	ON NO.	DATE
WO 2003008407	A2	20030130	WO 2002-F	R2500	20020715
WO 2003008407					
					CA, CH, CN,
					GD, GE, GH,
GM, HF	, HU, ID, I	L, IN, 1S,	JP, KE, KG,	KP, KR, KZ	, LC, LK, LR,
LS, LI	, LU, LV, M	A, MD, MG,	MK, MN, MW,	MX, MZ, NO	, NZ, OM, PH,
PL. PT	, RO, RU, S	D, SE, SG,	SI, SK, SL,	TJ, TM, TN	, TR, TT, TZ,
UA, UG	. US. UZ. V	N, YU, ZA,	ZM, ZW		
RW: GH. GN	. KE. LS. M	W, MZ, SD,	SL, SZ, TZ,	UG, ZM, ZW	AM, AZ, BY,
KG. KZ	. MD. RU. T	J, TM, AT,	BE, BG, CH,	CY, CZ, DE	DK, EE, ES,
FI. FI	GB. GR. I	E. IT. LU.	MC, NL, PT,	SE, SK, TR	BF, BJ, CF,
CG. CI	. CM. GA. G	N. GO. GW.	ML, MR, NE,	SN, TD, TG	
FR 2827604	A1	20030124	FR 2001-1	.0359	20010717
FR 2827604	R1	20030919			
CA 2450437 EP 1419150	AA	20030130	CA 2002-2	450437	20020715
EP 1419150	A2	20040519	EP 2002-7	74822	20020715
EP 1419150	B1	20050427			
R: AT, BI	. CH. DE. D	X, ES, FR.	GB, GR, IT,	LI, LU, NL	, SE, MC, PT,
TW: S1	. LT. LV. F	TI. RO. MK.	CY. AL. TR.	BG. CZ. EE	. sk
BR 2002011284	Α.	20040803	BR 2002-1	1284	20020715
CN 1533387	A	20040929	CN 2002-8	14262	20020715
JP 2004536131	T2	20041202	JP 2003-5	13966	20020715
BR 2002011284 CN 1533387 JP 2004536131 NZ 530144 AT 294171	A	20050324	NZ 2002-5	30144	20020715
AT 294171	E	20050515	AT 2002-7	74822	20020715
ZA 2003009717	Ā	20041215	ZA 2003-9	717	20031215
US 2004180878	8.1	20040016	115 2004-4	84370	20040116
HK 1061679	A1	20050722	HK 2004-1	04546	20040625
PRIORITY APPLN. IN	ro.:		FR 2001-1	0359	A 20010717
			WO 2002-F	R2500	20040625 A 20010717 W 20020715
OTHER SOURCE(S):	MARPA	AT 138:13733	37		
GI					

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued) 1-Piperazinecarboxamide, 4-(5-methyl-3-pyridazinyl)-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

$$R^1$$
 R^2
 R^3
 R^4
 R^3
 R^4
 R^5
 R^5
 R^6
 R^7

The invention concerns N-phenylsulfonyl-1,3-dihydro-2H-indole-2-one derivs. containing piperazinylcarbonyl or homopiperazinylcarbonyl (shown as

1

variables defined below: e.g. 5-chloro-1-[(2,4-dimethoxyphenyl)sulfonyl]-3-(2-methoxyphenyl)-3-{2-oxo-2-[4-(4-pyridinyl)-1-piperazinyl]ethyl]-1,3-dihydro-2H-indol-2-one), as well as their addition salts with acids or

(2-methoxyphenyl)-3-[2-oxo-2-[4-(4-pyridinyl)-1-piperazinyl]ethyl]-1,3-dihydro-ZH-indol-2-one), as well as their addition salts with acids or organic salts, their solvates and/or hydrate(s), exhibiting affinity and selectivity for arginine-vasopressin Vib receptors and/or for oxytocin selectivity for arginine-vasopressin Vib receptors and/or for oxytocin receptors, and further, for certain compds., an affinity for Via receptors. The invention also concerns the method for preparing them, intermediate compds. (I without phenylsulfonyl) for their preparation, pharmaceutical compns. containing them and their use for preparing medicines.

Fi = 1 or 2; X = -CH2-, -0-, -MH-, -0-CH2-, -NH-CH2-, -NH-CH2-(-1-), R1 = halo, (CI-C4) alkyl, (CI-C4) alkovy, R2 = M, halo, (CI-C4) alkyl, (CI-C4) alkovy, trifluoromethyl, R3 = halo, (CI-C3) alkyl, (CI-C4) alkovy, trifluoromethyl, R3 = halo, (CI-C3) alkyl, (CI-C3) alkovy, trifluoromethyl, rrifluoromethoy, R3 = halo, (CI-C4) alkovy, the second of the s

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

ACCESSION NUMBER:
DOCUMENT NUMBER:
1972:400176 CAPLUS
Tritte:
Thiourea derivatives with tuberculostatic action. II.
ACHOR(S):
TOLY, Solyca, S., Kocka, I., Toth, G., Toth, I.
CORPONATE SOURCE:
Note Chimica Academiae Scientiarum Hungaricae (1971),
69(2), 221-7
CODEN: ACASA2, ISSN: 0001-5407
Journal
LANGUAGE:
S-methoxymethylimocarbamides, and 19 1-substituted
S-methoxymethylimocarbamides, and 19 1-substituted
S-methoxymethylimocarbamides, and 19 1-substituted
spreases effect in vitro, being tuberculostatic activity,
1-(4-isoamyloxyphenyl)-3-carbethoxythiocarbamide (1) (23822-65-3) had the
greatest effect in vitro, being tuberculostatic at 0.4-0.8 µg/ml, and
it gave an expressed antituberculotic effect in mice and guinea pigs with
no toxic effects. The absorptive properties of I were also good.
II 35993-55-2 28313-50-7
RL: BAC (Biological activity or effector, except adverse): BSU (Biological
study, unclassified): THU (Therapeutic use): BIOL (Biological study): USES
(Uses)
(Uses)
(Uses)
(Uses)
(Chairmann Ame)

RN 38313-50-7 CAPLUS
CN 1-Piperazinecarbothioamide, N-(4-ethoxyphenyl)-4-(6-methoxy-3-pyridazinyl)(9C1) (CA INDEX NAME)

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1972:3796 CAPLUS
DOCUMENT NUMBER: 76:3796
AUTHOR(S): 76:3796
AUTHOR(S): Toldy, Lajosy Toth, Istvan, Borsy, Jozsef, Andrasi,
Ferenc
CORPORATE SOURCE: Inst. Med. Res., Budapest, Hung.
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1971),
70(1-2), 101-22
CODEN: ACASA2, ISSN: 0001-5407
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB Substituted piperazines were prepared as anticholinergic agents for treating
ulcers. 07 66 compds. prepared the 1-(9-xanthenecarbonyl)-4-[8-(4alkyl-1-piperazinyl)ethyl]piperazines (I) [especially I (R = iso-Bu)]
showed the best peroral resorption. In an example, 12.4 g 1-diethylcarbamoyl-4(P-chloroethyl)piperazine was stirred for 3 hr at 130' with
22.12 g N-diethylcarbamoylpiperazine. The mixture was cooled, worked up,
dissolved in MeOl and treated with ald. HCl to give 9.8 g II. Nineteen I
(R = alkyl, Co2Et, EtzNCO, substituted aryl, Co2CH2Ph) were prepared
analogously.
II 34581-03-0P
RL: SPN (Synthetic preparation), PREP (Preparation)
(preparation of)
RN 34581-03-08 CAFLUS
CN 1-Piperazinecarboxamide, 4-(6-chloro-3-pyridazinyl)-N,N-diethyl- (9CI)
(CA INDEX NAME)



1-13 4-7 13-14 13-17

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 1-13 2-3 3-4 4-5 4-7 5-6 13-14

exact bonds :

13-17

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

isolated ring systems :

containing 1 : 7 :

G1:0,S

Match level :

 $1: A \texttt{tom} \quad 2: A \texttt{tom} \quad 3: A \texttt{tom} \quad 4: A \texttt{tom} \quad 5: A \texttt{tom} \quad 6: A \texttt{tom} \quad 7: A \texttt{tom} \quad 8: A \texttt{tom} \quad 9: A \texttt{tom} \quad 10: A \texttt{tom}$

11:Atom 12:Atom 13:CLASS 14:CLASS 17:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

G1 0,S

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 15:48:45 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 44 TO ITERATE

<09/21/2005>

Habte

10/625,708 Page 4

100.0% PROCESSED 44 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 483 TO 1277
PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 15:48:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 614 TO ITERATE

100.0% PROCESSED 614 ITERATIONS 26 ANSWERS

SEARCH TIME: 00.00.01

L3 26 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 161.33 161.54

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FILE COVERS 1907 - 21 Sep 2005 VOL 143 ISS 13 FILE LAST UPDATED: 20 Sep 2005 (20050920/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 12 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
DOCUMENT NUMBER:
1143:78197

ITILE:
2005:540490 CAPLUS
143:78197

Preparation of substituted piperazine derivatives as CCRl receptor antagonists

Pennell, Andrew M. K.; Aggen, James B.; Wright, J. J. Klm; Sen, Subhabrata; Mcmaster, Brian E.; Dairaghi, Daniel Joseph Chen, Wei; Zhang, Penglie
Chemocentrym, Inc., USA
PCT Int. Appl., 552 pp.
CODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:
English
FAMILY ACC. NUM. COUNT:
3

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT				KIN	D	DATE			APPL	I CAT	ION	NO.		D.	ATE	
	2005				A1	-	2005	0623	,	¥O 2	004-	US41	509		2	0041	208
	W:	AE,	AG,	AL,	AM,	AŤ,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co.	CR,	CU,	CZ.	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TH,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	ŤΜ,	AΤ,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CH,	GΑ,	GN,	GQ,	G₩,	ML,
		MR,	NE,	SN,	TD,	TG											
US	2004	1622	82		A1		2004	0819	1	US 2	003-	7328	97		2	0031	209
RIORITY	APP	LN.	INFO	.:							003+				A 2	0031	209
											004~					0041	
									1	US 2	002-	4537	11P	1	P 2	0020	612
									1	US 2	003-	4607	52	1	A2 2	0030	611

MARPAT 143:78197

ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued) 637020-40-7 CAPLUS Piperazine, 1-[6-chloro-5-methyl-3-pyridazinyl]-4-[{4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl}acetyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Title compds. I [wherein Rl = independently halo/cyclo/alkyl, alkenyl, alkynyl, amido, etc.; Arl = (un) substituted Ph, naphthyl, pyridyl, pyrazinyl, triazinyl, quinolinyl, etc.; HAr = (un) substituted heteroaryl selected from pyrazolyl, imidazolyl, triazolyl, tetrazolyl, etc.; Ll = (un) substituted linking group; m = 0-10; n = 1-2; with the proviso that certain compds. are absent; and pharmaceutically acceptable salts or N-oxides thereof] were prepared as CCRI receptor antagonists. For example, amination of 2-Chloro-1-[4-(4-chloro-3-methoxyphenyl)-2-(5)-methyl-piprazol-3-yl)pyridine gave II. Selected I showed inhibition against CCRI receptor with IC50 < 500 nM in chemotaxis and/or binding assays. Thus, I and their pharmaceutical compns. are useful for the treatment of CCRI-mediated diseases, and as controls in assays for the identification of competitive CCRI antagonists. 637020-92-79 637020-94-04-79
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses)

(preparation of aryl piperazine derivs. as CCRI receptor antagonists) 637020-32-7 CAPLUS

Piperazine, 1-[[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(6-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$F_3 \subset \mathbb{R} \longrightarrow \mathbb$$

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2005:331950 CAPLUS DOCUMENT NUMBER: 143:43843 TITLE: Danies Co.

143:43843 synthesis of potent pyridazine inhibitors of p38 MAP Kinase
of p38 MAP Kinase
Tamayo, Nuriar Liao, Lillian; Goldberg, Martin;
Powers, David; Tudor, Yan-Yan; Yu, Violeta; Wong, Lu
Min; Henkle, Bradley; Middleton, Scot Syed, Rashid;
Harvey, Timothy; Jang, Graham; Hungate, Randall;
Dominguez, Celia
Chemistry Research and Discovery, Amgen, Inc.,
Thousand Oaks, CA, 91320, USA
Bioorganic & Medicinal Chemistry Letters (2005),
15(9), 2409-2413
CODEN: BRUEL8; ISSN: 0960-894X
Elsevier B.V.
Journal AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLI SHER:

DOCUMENT TYPE: LANGUAGE:

LISHER: Elsewier B.V.

MENT TYPE: Journal

JUNGE: English

Novel potent trisubstituted pyridazine inhibitors of p38 MAP (mitogen
activated protein) kinase are described that have activity in both
cell-based assays of cytokine release and animal models of rheumatoid
arthritis. They demonstrated potent inhibition of LPS-induced TNF-c
production in mice and exhibited good efficacy in the rat collagen induced
arthritis model.
853730-52-69

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
(Biological study); PREF (Preparation)
(design and synthesis of potent pyridazine inhibitors of p38 MAP
kinase)
853730-52-6 CAPLUS

Piperazine, 1-(hydroxyacety1)-4-[6-(2-naphthaleny1)-5-(4-pyridiny1)-3pyridaziny1)-2-(phenylmethy1)-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2005:120714 CAPLUS DOCUMENT NUMBER: 142:219310

DOCUMENT NUMBER:

INVENTOR(S):

ACTION 142:19310
Preparation of pyridazine derivatives as stearcyl-CoA desaturase inhibitors for the treatment of diabetes and other diseases
Abreo, Nelwyn; Chafeev, Mikhail; Chakka, Nagasree; Chowdhury, Sultan; Pu, Jian-Min; Gschwend, Heinz W.; Holladay, Mark W.; Hou, Duanjie; Kamboj, Rajender; Kodumuru, Vishnumurthy; Li, Wenbao; Liu, Shifeng; Raina, Vandna; Sun, Sengen; Sun, Shaoyi; Sviridov, Serquei; Tu, Chi; Winther, Hichael D.; Zhang, Zaihui Xenon Pharmaceuticals Inc., Can.
PCT Int. Appl., 194 pp.
CODEN: PIXXO2
Patent
English

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

English 5

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

FWID	• .	MFOR	mar I	OI4.														
												LICAT				D	ATE	
																-		
		2005				A2					WO	2004~	US24	548		2	0040	729
	WO	2005																
		W:										, BG,						
												, EC,						
												, JP,						
												, MK,						
												, sc,						
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	ŲS	, UZ,	VC,	VN,	YU,	ZΑ,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	\$D	, SL,	SZ,	ΤZ,	ŪĠ,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	AT	, BE,	ВG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	ΙT	, LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CH	, GA,	GN,	GQ,	G₩,	ML,	MR,	NE.
			SN,	TD,	TG													
	US	2005	0651	43		A1		2005	0324		US	2004-	9015	63		2	0040	729
PRIOR	IT:	(APP	LN.	INFO	.:						US	2003-	4910	95P	1	P 2	0030	730
											US	2004-	5467	8 6 P	1	P 2	0040	223
											US	2004-	5468	15P	- 1	P 2	0040	223
											US	2004-	5468	20P		P 2	0040	223
											US	2004-	5468	98P		P 2	0040	223
											US	2004-	5469	34P		P 2	0040	223
											US	2004-	5534	03P		P 2	0040	316
											US	2004-	5534	04P		P 2	0040	316
											US	2004-	5534	16P		P 2	0040	316
											US	2004-	5534	46P		P 2	0040	316
											US	2004-	5534	91P		P 2	0040	316
OTHER	R 50	URCE	(S):			MAR	PAT	142:	2193	10								

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued) 840480-46-2P, 6-[4-(4,4,4-Trifluoro-3-methylbut-2-enoyl)piperazin-1-yl)pyridazine-3-carboxylic acid (3-methylbutyl)anide 840489-65-5P, 6-[4-(4,4,4-Trifluoro-2-methylbutyr)piperazin-1-yl)pyridazine-3-carboxylic acid (3-methylbutyl)anide 840489-67-7P, 6-[4-(4,4-Trifluoro-3-methylbutyr)piperazin-1-yl)pyridazine-3-carboxylic acid (3-methylbutyl)piperazin-1-yl)pyridazine-3-carboxylic acid (3-methylbutyl)anide 840480-68-8P, 6-[4-(4,4-Trifluoro-0-typyl)pyreazin-1-yl)pyridazine-3-carboxylic acid (3-methylbutyl)anide 840480-74-6P, 6-[4-(3,3,3-Trifluoro-2-wethylpropionyl)piperazin-1-yl)pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Interspectic use) fold (stotogical study) FAR (Freparation) 0525 (USes) (inhibitor) preps. of piperazinylpyridazines as stearcyl-CoA desaturase inhibitors) 840489-28-3 CAPUS 3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-(2-ethyl-1-oxobutyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840489-38-5 CAPLUS
3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-[3,3,3-trifluoro-2-mathyl-1-oxo-2-(trifluoromethyl)propyl]-1-piperazinyl]- (SCI) (CA INDEX NAME)

840489-41-0 CAPLUS
3-Pyridazinecateboxamide, N-(2-cyclopropylethyl)-6-[4-(2,2-dimethyl-1-oxopropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

<09/21/2005>

840490-25-7 CAPLUS
3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-(2,2-dimethyl-1-oxobutyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

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L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Title compds. I [wherein x, y = 1-3; W = C(0)N(R1), C(0)N(C(0)R1a], N(R1)C(0)N(R1) or N(R1)C(0), Y = C(0/S) or C(R10)H; R1 = H or (un)substituted alkyl, R1a = H or (cyclo)alkyl; R2, R3 = alk(en)yl, (hetero)aryl or heterocyclyl; R4, R5 = H, F, He, HeO or amine; R6, R6a, R7, R7a, R8, R8a, R9, R9a, R10 = H or alkyl; etc., and stereoisomers, enantiomers or tautomers, pharmaceutically acceptable salts, pharmaceutical compons. or prodrugs thereof] were prepared as stearcyl-CoA desaturase (SCD) inhibitors. For example, acylation of 1-Boc-piperazine with 2-trifluoromethylbenzoyl chloride followed by deprotection with TFA in dichloromethane gave the corresponding benzoylated piperazine. This compound underwent condensation with 3-amino-6-chloropyridazine, and the resultant 3-pyridazinamine was then coupled with 4-methylpentancic acid to afford piperazinylpyridazine II. I and their pharmaceutical compons. are useful in the treatment of SCD-mediated diseases, such as diabetes, obseity and fatty liver.

800689-28-3P, 6-(4-(2-Ethylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 800489-38-5P, 6-(4-(2,2-Dimethylprojonyl)piperazin-1-yl]pyridazina-3-carboxylic acid (2-cyclopropylethyl)amide 804990-34-8P, 6-(4-(4,4,4-Trifluorobut-2-encyll)perazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-36-0P, 6-(4-(4,4,4-Trifluoro-3-hydroxy-3-trifluoromethylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-36-0P, 6-(4-(4,4,4-Trifluoro-3-hydroxy-3-trifluoromethylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-37-1P, 6-(4-(4,4,4-Trifluoro-3-hydroxy-3-trifluoromethylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-03-60-6-(4-(4,4,4-Trifluoro-3-hydroxy-3-methylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-03-60-6-(4-(4,4,4-Trifluoro-3-hydroxy-3-methylbutyryl)piperazin-1-yl]pyridazine-3-carboxylic acid (2-cyclopropylethyl)amide 80490-03-6-0-6-(4-(4,4,4-Tr

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

840490-26-8 CAPLUS 3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-(2,2-dimethyl-1-oxopentyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-34-8 CAPLUS
3-Pyridazinezarboxamide, N-(2-cyclopropylethyl)-6-[4-(4,4,4-trifluoro-loxo-2-butenyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-36-0 CAPLUS 3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-[4,4,4-trifluoro-3-hydroxy-1-oxo-3-(trifluoromethyl)butyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-37-1 CAPLUS
3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-(4,4,4-trifluoro-3-hydroxy-3-methyl-1-oxobutyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

Page 7

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

840490-40-6 CAPLUS
3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-[4,4,4-trifluoro-1-oxo-3-(trifluoromethyl)-2-butenyl]-1-piperazinyl}- (9CI) (CA INDEX NAME)

840490-43-9 CAPLUS 3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-[[2-(trifluoromethyl)phenyl]acetyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-46-2 CAPLUS
3-Pyridazinecarboxamide, N-(3-methylbutyl)-6-[4-(4,4,4-trifluoro-3-methyl-1-oxo-2-butenyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-65-5 CAPLUS
3-Pyridazinecarboxamide, N-(3-methylbutyl)-6-[4-(4,4,4-trifluoro-2-methyl-oxobutyl)-l-piperazinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STM ACCESSION NUMBER: 2004:681395 CAPLUS DOCUMENT NUMBER: 141:190799
TITLE: Preparation of substituted pig

Preparation of substituted piperazines as CCR1

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

Preparation of substituted piperazines as CCR1 receptor antagonists Pennell, Andrew M. K. / Aggen, James B., Wright, J. J. Kims Sen, Subhabratar McMaster, Brian E. / Dairaghi, Daniel Joseph Chemocentryw, Inc., USA U.S. Pat. Appl. Publ., 176 pp., Cont.-in-part of U.S. Pat. Appl. 2004 82,571.
CODEN: USXXXCO
Patent

Patent English 3

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRIC

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
						-									-		
US	2004	1622	82		A1		2004	0819		US 2	003-	7328	97		2	0031	209
US	2004	0825	71		A1		2004	0429		US 2	003-	4607	52		21	0030	611
WO	2005	0560	15		A1		2005	0623		WO 2	004-	US41	509		2	0041	208
	W:	AE.	AG.	AL.	AM.	AT.	AU,	AZ.	BA.	BB,	BG.	BR.	BW.	BY.	BZ.	CA,	CH,
							DE.										
		GE.	GH.	GM.	HR.	HU.	ID,	IL.	IN.	IS.	JP.	KE.	KG.	KP.	KR.	ĸz.	LC.
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							PL.										
							TZ,										
	RW:	BW.															
		AZ.	BY.	KG.	KZ.	MD.	RU.	TJ.	TM.	AT.	BE.	BG.	CH,	CY.	cz,	DE.	DK.
		EE.	ES.	FI.	FR.	GB.	GR.	HU.	IE.	IS.	IT.	LT.	LU.	MC.	NL.	PL.	PT.
		RO.	SE.	SI.	SK.	TR.	BF.	BJ.	CF.	CG.	CI.	CM.	GA.	GN.	GO.	GW.	ML.
				SN,													
ORITY	APE									US 2	002-	4537	11P		P · 2	0020	612
										US 2	003-	4607	52	- 7	A2 2	0030	611

OTHER SOURCE(S): MARPAT 141:190799 L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

840490-67-7 CAPLUS
3-Pyridazinecarboxamide, N-(3-methylbutyl)-6-(4-(4,4,4-trifluoro-3-methyl-loxobutyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-68-8 CAPLUS
3-Pyridazineza-hoxamide, N-(3-methylbutyl)-6-[4-(4,4,4-trifluoro-loxbutyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

840490-74-6 CAPLUS
3-Pyridazinecarboxamide, N-(2-cyclopropylethyl)-6-[4-(3,3,3-trifluoro-2-hydroxy-2-methyl-1-oxopropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

Title compds. presented by the formula I (wherein RI = independently (helo)alkyl, cycloalkyl, alkenyl, alkynyl, amido, etc.; ArI = (un)substituted Ph, naphthyl, pyridyl, pyrazinyl, etc.; HAr = (un)substituted pyrazolyl, inidazolyl, triazolyl, etc.; LI = (un)substituted pixeceptable salts on N-oxides thereoff were prepared as CCRI receptor antagonists. For example, reaction of 3-heptafluoropropyl-5-methyl-4-nitro-IH-pyrazole and 2-chloro-1-[4-(4-fluorophenyl)piperazin-1-yllethanone gave II. I showed inhibition against CCRI receptor (e.g. IC50 = 0.112 MM for II). Thus, I and their pharmaceutical compns. are useful for the treatment of CCRI-mediated diseases, and as controls in assays for the identification of competitive CCRI antagonists.

637020-32-7P 637020-40-7P

RL: PAC (Pharmacological stativity), SPN (Synthetic preparation), TRU (Therapeutic use), BIOL (Biological study), PREP (Preparation) USES (Uses)

11

(Uses) (preparation of aryl piperazines as CCR1 receptor antagonists) 637020-32-7 CAPLUS
Piperazines 1-[(4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(6-methyl-3-pyridazinyl)- (9CI) (CA INDEX NAME)

$$F_3 \subset \bigvee_{C1}^{N} \bigcap_{He} CH_2 - C - \bigcap_{N} \bigcap_{He} \bigcap_{He} CH_2 - C - \bigcap_{N} \bigcap_{H$$

637020-40-7 CAPLUS
Piperazine, 1-(6-chloro-5-methyl-3-pyridazinyl)-4-[[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L4 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
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FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
						-									-		
WO	2003	1058	53		A1		2003	1224	,	WO 2	003-	US18	660		20	0030	611
	W:	ΑE,	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN.
							DK.										
							IN,										
							MD,										
		PH,	PŁ,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	Z₩					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK.	TR,
		BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML.	MR,	NE,	SN,	TD,	TG
CA	2488																
EP	1531	822			A1		2005	0525		EP 2	003-	7370	57		21	0030	611
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI.	LU,	NL,	SE,	MC.	PT.
							RO,										
PRIORIT	Y APP	LN.	INFO	. :			-		-	US 2	002-	4537	11P		21	0020	612
										30 Z	003-1	1010	660		J 21	2030	611

OTHER SOURCE(S): MARPAT 140:42209

ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

Title compds. I {n = 1-2; m = 0-10; R1 = alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl, etc.; Ar1 = Ph, naphthyl, pyridyl, etc.; HAr = pyrazolyl, imidazolyl, triazolyl, etc.; I = linking group having 1-3 chain atoms with some provisions] are prepared For instance, 2-[(4-chloro-5-methyl-3-trifluoromethylpyrazol-1-yl-1-piperazinyl]ethanone (preparation given) is reacted with 6-chloropurine to

II. I are potent antagonists of the CCR1 receptor and are useful in the treatment of inflammation.
637020-32-79 637020-40-79 R.: PAC (Pharmacological activity), SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation), USES (Uses)
[preparation of 1-ary1-4-substituted piperazine CCR1 antagonists for treatment of inflammation and immune disorders]
637020-32-7 CAPLUS
Piperazine, 1-[(4-chloro-5-methy1-3-(trifluoromethy1)-1H-pyrezol-1-y1]acety1]-4-(6-methy1-3-pyridaziny1)- (9CI) (CA INDEX NAME)

637020-40-7 CAPLUS
Piperazine, 1-(6-chloro-5-methyl-3-pyridazinyl)-4-[(4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl)acetyl)- (9CI) (CA INDEX NAME)

ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

(Continued)

Page 9

L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS ON STN ACCESSION NUMBER: 2003:223755 CAPLUS DOCUMENT NUMBER: 138:255254 DOCUMENT NUMBER: 139:255254
Preparation of oxamate derivatives with nitrogen part of six-membered heterocycle useful for treating hyperglycemia-related disorders
Moinet, Gerard: Leriche, Gerard
Lipha, Fr.
Fr. Denande, 43 pp.
CODEN: FEXCEL TITLE: INVENTOR (S):
PATENT ASSIGNEE (S):
SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE A1 A2 A3 FR 2001-11950 WO 2002-EP9435 FR 2829766 WO 2003024946 20030321 20010914 W0 2003024946 A2 20030227 W0 2002-EP9435 20020823
W0 2003024946 A3 20031204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, EZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KC, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MV, MX, MZ, NO, NZ, CM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TL, UA, UG, US, UZ, VN, YU, ZA, ZM, ZV
RW: GH, GH, KE, LS, WY, MZ, SD, SL, SZ, TZ, UG, ZM, ZV, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, PI, FI, FR, GB, GR, LE, IT, LU, LV, CN, LPT, SE, SK, TR, BF, BJ, CF, CR, CT, CT, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INPO::

OTHER SOURCE(S):

MARPAT 138:255254 20030327 SOURCE (S):

The invention relates to heterocyclic oxamates (shown as I) variables defined below, e.g. sodium (4-acetylpiperazino) oxoacetate), tautomeric, enantiomeric, diastereomeric and epimeric forms and pharmaceutically acceptable salts, methods for preparing them and use in treatment of pathologies associated with the hyperglycemia. For I: R = H, alkyl (C1-C3), X = O, S, -CRSh5'- or -NRG-', RI, R2, R3 and R4 = H or alkyl (C1-C3), addnl. details are given in the claims. The ability of 18 examples of I to reduce glycemia in diabetic rats is tabulated for 20 mg/kg/day after 1 and 4 days of treatment for example, 18, 24, 16 and 18 %, resp., redns. were found for sodium (4-acetylpiperazino) oxoacetate. One example preparation of I is included, but characterization data is included for 155 examples of I.

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2003:76773 CAPLUS DOCUMENT NUMBER: 130:13737 TITLE: Preparation

138:137337
Preparation of N-phenylsulfonyl-1,3-dihydro-2H-indol-2one derivatives containing piperazinylcarbonyl or
homopiperazinylcarbonyl as vasopressin receptor
inhibitors, their preparation and their therapeutic

inhibitors, their preparation and their therapeu use
Di Malta, Alain, Garcia, Georges, Roux, Richard, Schoentjes, Bruno; Serradeil-le Gal, Claudine; Tonnerre, Bernard, Wagnon, Jean Sanofi-Synthelabo, Fr. PCT int. Appl., 112 pp. CODEN: PIXXD2
Patent
French
1 INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.							APPLICATION NO.										
										WO :	2002-1	FR25	00		2	0020	715
WO	2003																
	W:										, BG,						
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN.	IS,	JP,	KE	KG,	KP,	KR.	KZ.	LC.	LK.	LR.
		LS,	LT,	LU,	LV.	MA,	MD,	MG,	MK.	MN.	, MW,	MX,	MZ.	NO.	NZ.	OM.	PH.
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FR	2827										2001-					0010	717
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CA	2450	437			21		2003	0130		CA	2002-	2450	437		2	ກກວກ	715
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JP	2004	2301	31		12		2004	1202		JP .	2003-	5139	00		- 4	0020	/15
NZ	2004 5301 2941	44			Α.		2005	0324		NZ .	2002- 2002-	5301	44		2	0020	/15
AT	2941	71			Е		2005	0515		AT :	2002-	//48	22		- 2	0020	/15
ZA	2003	0097	17		Α.		2004	1215		ZA :	2003-	9717			2	0031	215
US	2004	1808	78		A1		2004	0916		US :	2004-	4843	70		2	0040	116
HX	1061	679			A1		2005	0722		HK :	- 1005	1045	46		2	0040	625
PRIORIT	Y APP	LN.	Info	. :						FR :	2004- 2004- 2001- 2002-1	1035	9		A 2	0010	717
										MO :	2002-1	FR25	00	1	W 2	0020	715
OTHER S	OURCE	(S):			MARI	PAT.	138:	1373:	37								
GI																	

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
For example, [4-(3-mathoxyphenyl)piperazin-1-yl]oxoacetic acid was prepd.
in 41% yield from reaction of 1-(3-mathoxyphenyl)piperazine in THF with
ethoxalyl chloride in toluene in the presence of X2CO3 followed by base
hydrolysis of the formed ester. 2-Oxo-[4-(toluene-4-sulfonyl)piperazin-1yl]acetic acid Et ester was prepd. in 54% yield by reacting piperazine
with ethoxalyl chloride in acetic acid to give 2-oxo-2-piperazin-1ylacetic acid Et ester hydrochloride followed by toxylation.
502456-36-6F, (4-(6-Chloropyridazin-3-yl)piperazin-1-yl)oxoacetic
acid

acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses)
(drug candidate; preparation of oxamate derivs. with nitrogen part of six-membered heterocycle useful for treating hyperglycemia-related disorders)
502456-56-6 CAPLUS
1-Piperazineacetic acid, 4-(6-chloro-3-pyridazinyl)-α-οxο- (9CI)
(CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

$$\begin{array}{c|c}
R^{1} & & & \\
R^{2} & & & \\
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R^{2} & & & \\
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R^{7} & & & \\
\end{array}$$

The invention concerns N-phenylsulfonyl-1,3-dihydro-2H-indole-2-one derivs. containing piperazinylcarbonyl or homopiperazinylcarbonyl (shown as

variables defined below; e.g. 5-chloro-1-{(2,4-dimethoxyphenyl)sulfonyl]-3-(2-methoxyphenyl)-3-{2-oxo-2-[4-(4-pyridinyl)-1-piperazinyl]ethyl]-1,3-dihydro-2H-indol-2-one), as well as their addition salts with acids or

organic
salts, their solvates and/or hydrate(s), exhibiting affinity and
selectivity for arginine-vasopressin VIb receptors and/or for oxytocin
receptors, and further, for certain compds., an affinity for VIa
receptors. The invention also concerns the method for preparing them,
intermediate compds. (I without phenylsulfonyl) for their preparation,
pharmaceutical compns. containing them and their use for preparing
medicines.

intermediate compds. (I without pheny|sulfonyl) for their preparation, pharmaceutical compns. containing them and their use for preparing medicines.

For I: n = l or 2, X = -CH2-, -O-, -NH-, -O-CH2-, -NH-CH2-, NH-CH2-CH2-, Rl = halo, (Cl-C4) alkyl, (Cl-C4) alkoxy, R2 = H, halo, (Cl-C4) alkyl, (Cl-C4) alkoxy, trifluoromethyl), R3 = halo, (Cl-C3) alkyl, (Cl-C3) alkyl, (Cl-C3) alkyl, (Cl-C3) alkyl, trifluoromethyl, R3 = halo, (Cl-C3) alkyl, (Cl-C3) alkyl, thiazol-2-yl, oxazol-2-yl, imidazol-2-yl, R6 = (Cl-C4) alkoxy, R7 = (Cl-C4) alkoxy, R7 = (Cl-C4) alkoxy, Compds. I exhibit inhibition concons. (ICSO) for Vla and Vlb vasopressin receptors and for oxytocin receptors from 10-6 to 10-9 H and for V2 receptors better than 10-6 H. About 40 examples of intermediate prepns. and 92 examples of preparation of I are included.

1 49242-09-44, S-Chloro-1-[(2,4-dimethoxyphenyl) sulfonyl]-3-[(2-isopropoxyphenyl)-3-[(2-cso-2-[4-(pyridazin-3-yl)-1-piperazinyl]ethyl]-1,3-dihydro-ZH-indol-2-cone

RL: PAC (Pharmacological activity): SFN (Synthetic preparation): USES (Uses)

(drug candidate; preparation of N-phenylsulfonyldihydroindolone derivs. containing piperazinylcarbonyl or homopiperazinylcarbonyl as vasopressin receptor inhibitors, their preparation and their therapeutic use)

RN 492432-09-4 (CAPLUS

RN 492432-09-4 (CAPLUS

RN 492432-09-4 (Caplus (Caplus CAPLUS) (CAPLUS (CAPLUS) (CAP

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

492431-87-5P, 5-Chloro-3-(2-isopropoxyphenyl)-3-[2-oxo-2-[4-(pyridazin-3-yl)-1-piperazinyl]ethyl]-1,3-dihydro-2H-indol-2-one RL: RCT (Reactant) SPM (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-phenylsulfonyldihydroindolone derivs. containing piperazinylcarbonyl or homopiperazinylcarbonyl as vasopressin receptor inhibitors, their preparation and their therapeutic use) 492431-87-5 CAPLUS Piperazine, 1-[5-chloro-2,3-dihydro-3-[2-(1-methylethoxy)phenyl]-2-oxo-lH-indol-3-yl]acetyl]-4-(3-pyridazinyl)- (SCI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A

PAGE 2-A

IT 491837-79-79 491837-85-5P
RL: RCT (Reactant): SFN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(preparation of Uracil derivs. as inhibitors of poly(ADP-ribose) polymerase1)
RN 491837-79-7 CAPLUS
CN Piperazine, 1-(aminoacety1)-4-(3-pyridaziny1)- (9CI) (CA INDEX NAME)

<09/21/2005>

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L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
138:137076

AUTHOR(S):

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

SOURCE:

DIBLISHER:
PUBLISHER:
AUGUAGE:
AUGUAGE:
AUGUAGE:
CAPLUS COPYRIGHT 2005 ACS on STN
2002:767295 CAPLUS
138:137076
Substituted uracil derivatives as potent inhibitors of poly(ADF-ribose) polymerase-1 (PARP-1)
Steinhagen, Henning Gerisch, Michael: Mittendorf,
Joachim Schlemmer, Karl-Heinz: Albrecht, Barbara
Institute of Medicinal Chemistry, Pharma Research
Centre, Bayer AG, Wuppertal, D-42096, Germany
Bioorganic & Medicinal Chemistry Letters (2002),
12(21), 3187-3190
COEMS: MRCLEE: ISSN: 0960-894X
Elsevier Science Ltd.
Journal
Lnglish
OTHER SOURCE(S):
G1

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

A new class of PARP-1 inhibitors, namely substituted fused uracil derivs. such as I, were synthesized. Starting from a derivative with an ICSO-2 μM the chemical optimization program led to compds. with more than a 100-fold increase in potency (ICSO-20 mM). Addnl., physicochem. and pharmacokinetic properties were evaluated. It could be shown that compds. bearing a piperaxine or Ph substituted βAla-Gly side chain exhibited the best overall profile.

49:837-62-88

IT 491837-62-8P

RL: PAC (Pharmacological activity), SPN (Synthetic preparation), BIOL (Biological study); PREP (Preparation)

(preparation of uracil derivs, as inhibitors of poly(ADP-ribose)polymerase
1)

RN 491837-62-8 CAPLUS

ZH-Thiopyrano(4,3-d]pyrimidine-1(5H)-propanamide, 3,4,7,8-tetrahydro-2,4-dioxo-N-[2-oxo-2-[4-(3-pyridazinyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

491837-85-5 CAPLUS
Piperazine, 1-(chloroacetyl)-4-(3-pyridazinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 26

10/625,708

Page 11

L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS OD STN ACCESSION NUMBER: 1992:528058 CAPLUS DOCUMENT NUMBER: 117:128058

DOCUMENT NUMBER:

TITLE:

117:128058
Nitroimidazoles, part XXIII - activity of satranidazole series against anaerobic infections Nagarajan, K.; Gowrishankar, R.; Arya, V. P.; George, T.; Nair, M. D.; Shenoy, S. J.; Sudarsanam, V. Hind. CIBA-GEIGY Res. Cent., Bombay, 400 063, India Indian Journal of Experimental Biology (1992), 30(3), 193-200 AUTHOR(S): CORPORATE SOURCE: SOURCE:

CODEN: IJERA6: ISSN: 0019-5189

DOCUMENT TYPE: English

LANGUAGE:

AB A large number of nitroimidazoles were examined for in vitro activity against 3 anaerobes - Bacteroides fragilis (Bf), a strain of Bf resistant to metronidazole (I) and Clostridium perfringens and many found to be active. Among these may be mentioned 1-methyl-5-nitroimidazoles carrying N-bound heterocycles at position 2, such as astranidazole (II) and III (Rl = H, R2 - SOZEt, SOZNMe2, morpholinylcarbonyl, morpholinoethylaminothioxomethyl) which are at least twice as active as I, ornidazole (IV) and tinidazole (V). Even more active are 5-nitroimidazoleylienzimidazole, are feebly active. Among 5-nitroimidazole are freebly active. Among 5-nitroimidazole with a carbon substituent at position 2, I, IV and V are equiactive while dimetridazole is more active than I against Bf. Some 2-vinyl derives. are very potent, with VI and VII being outstanding. Activity better than I is seen for nitroimidazooxazepines. 5-Nitroimidazoles are more active against anaerobes than the 4-nitro isomers. Antianaerobic and antiamoebic activities generally run parallel in these classes of compds. The study has led to the elaboration of the

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:129918 CAPLUS

104:129918 CAPLUS

Patent English DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.		DATE	APPLICATION NO.		DATE
EP 156433	A2	19851002			19850315
		19860723	EF 1985-200384		19050515
EP 156433	B1	19910227			
R: AT, BE, CH,			II III NI SP		
US 5001125		10010310	TIC 1005 702772		19850215
			AT 1985-200384 CZ 1985-1952 NO 1985-1167		19850315
C7 277730	P.6	10030313	C7 1985-1952		19850320
NO 9501167	D.O.	10850027	NO 1995-1167		19850320
NO 161257	2	10000327	110 1303 1107		13030322
AT 61050 CZ 277730 NO 8501167 NO 161257 NO 161257 ES 541521 SU 1384199	Č	19850927 19890417 19890726			
FS 541521	ă.1	19860416	ES 1985-541521		19850322
SII 1304100	A3	19880323	SU 1985-3867689		19850322
			DV 1085-1341		19850325
DK 0501541	î	19930321	DR 1303 1341		17000020
DK 166277	č	19930929			
DK 1002//	,	10850027	FI 1985-1177		10050325
FI 05011//	ĥ	10011231	11 1303-1177		13030323
DK 166277 DK 166277 FI 8501177 FI 85373 FI 85373 AU 8540348	č	19920410			
MI 9540349	ă1	19851003	AU 1985-40348		19850325
AU 576563	B2	19880901	A0 1305 40540		13030323
JP 60226862	12	19851112	JP 1985-58636		19850325
HU 37614	A2	19860123	HU 1985-1127		19850325
HU 198010	В	19890728	110 1303-112.		17030323
ZA 8502235	Ä	19861126	ZA 1985-2235		19850325
11. 74707	A1	19880531	IL 1985-74707		
Ch 1239321	A1	19880621	CA 1985-477330		
PL 147465	B1 B3	19890630			
RO 91197	83	19870630	RO 1985-118137		19850326
US 5157035		19921020			
US 5292738	â	19940308	US 1992-929622		19920813
PRIORITY APPLN. INFO.:			US 1984-593444	Α	19840326
			US 1985-702772	A	19850215
			US 1991-637091 US 1992-929622 US 1984-593444 US 1985-702772 EP 1985-200384	A	19850315
			US 1991-637091	A3	19910103

For diagram(s), see printed CA Issue.

The title compds. I [Rl = H, halo, lH-imidazol-1-yl, alkylowy, arylowy, aralkowy, alkylthio, arylthio, NO, Hs, amino, alkylsulfinyl, arylowy, alkylsulfonyl, cyano, alkowycarbomyl, alkanoyl, alkylr R2, R3 = H, alkyl, R2R3 = CH:GGCH:GH; X = CH:NCH:GH2, optionally alkylr or aryl-substituted CHM2DNNEGHAD, CHM2DRSR6GCHAD, CM-HEZ(ah-1)CRF:CRSCHADR:R R4 = H, alkyl, aryl, thiazolyl, pyrimidinyl, quinolinyl, etc., R5 = H, alkyl, aryl, though etc., R6 = H, alkyl, aryl, alkyl, aryl, aralkyl, aryl, aralkyl, aryl, aralkyl, aryl, aralkyl, aryl, aralkyl, pyridinyl, aryl = (un)substituted Ph; m, n = 1-4; m+n

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ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN antianaerobic profile of II. 87008-25-1 L4 (Continued)

ΙŤ

e.vue-ze-i CAPUN Piperazine, l-acetyl-4-(6-[2-(1-methyl-5-nitro-lH-imidazol-2-yl)ethenyl]-3-pyridazinyl]- (SCI) (CA INDEX NAME)

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN (Continued) = 3-5) were prepd. Thus, 3,6-dichloropyridazine was treated with 1,2,3,6-tetrahydro-4-(3-methylphenyl)pyridine to give pyridinylpyridazine II, which in the Rhinovirus Cytopathic Effect Test gave 0.006 µg/mL as the lowest concon. necessary to inhibit 275% of the cytopathic effect of human rhinovirus. Oral drops were prepd. by dissolving 500 g I in 0.5 L MeCHOHCO2H and 1.5 L polypropylene glycol at 60-80°, cooling to 30-40°, adding 35 L polyethylene glycol at 60-80°, and finally polyethylene glycol, mixing well, adding 1750 g Na saccharin in 2.5 L purified H2O and 2.5 L cocca flavor, and finally polyethylene glycol to 50 L to provide a soln. comprising 10 mg I/mL.

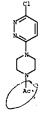
and finally polyechylene yajout ...

[Mag I/mL. 100241-18-79
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREF (Freparation); USES (Uses) (preparation of, as virucide)

100241-18-7 CAPLUS

Piperazine, 1-acetyl-4-(6-chloro-3-pyridazinyl)- (9CI) (CA INDEX NAME)



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Page 12

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS ON STN ACCESSION NUMBER: 1984:603875 CAPLUS DOCUMENT NUMBER: 101:203875

DOCUMENT NUMBER: TITLE:

101:203875
Nitroinidazoles: part XIX - structure-activity
relationships
Nagarajan, K., Arya, V. P.; George, T.; Nair, M. D.;
Sudarsanan, V.; Ray, D. X.; Shrivastava, V. B.
Res. Cent., CIBA-GEIGY, Bombay, 400 063, India
Indian Journal of Chemistry, Section B: Organic
Chemistry Including Medicinal Chemistry (1984),
238(4), 342-62
CODEN: IJSBOB; ISSN: 0376-4699 AUTHOR (S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

A variety of nitroimidazoles, mostly 1,2-disubstituted-5-nitro derivs. were examined for in vitro activity against Entamoebs histolytics and for effectiveness in treating early hepsalic infection in golden hamsters. Hany compds. carried a functionalized N atom at position 2. In vivo activity was observed with 1-alkyl-5-nitroimidazoles carrying a substituted imidazolidinone or imidazole. Among these derivs. 1-methylaulfonyl-3-(1) methyl-5-nitro-2-imidazolyl)-2-imidazolidinone (I) [56302-13-7] was the most potent against hepatic and caecal infections of E. histolytica in the golden hamster and Trichomonas foetus infections in mice. It was developed as a drug for treatment of amoebiasis, giardissis, and trichomoniasis. The structure-antiamebic activity relationships of the nitroimidazoles are discussed. 87008-25-1

87008-25-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amebicidal activity of, structure in relation to)
87008-25-1 CAPLUS
Piperazine, 1-acetyl-4-[6-[2-(1-methyl-5-nitro-lH-imidazol-2-yl) ethenyl]-3-pyridazinyl]- (9CI) (CA INDEX NAME)

DOCUMENT NUMBER:

TITLE:

AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE: GI

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